

**Request to Archive
With The National Centers for Environmental Information
For GPS RO-Calibrated AMSU Channels 7 (Temperatures of Troposphere / Stratosphere,
TTS) & ch9 (Temperatures in the Lower Stratosphere, TLS)
Provided by NCAR**

2013-09-12

This information will be used by NCEI to conduct an appraisal and make a decision on the request.

1. Who is the primary point of contact for this request?

Philip Jones
NCDC
Archive Specialist
+1 828-271-4472
philip.jones@noaa.gov

2. Name the organization or group responsible for creating the dataset.

UCAR COSMIC

3. Provide an overview summarizing the scope of data you want to archive. Describe the outputs, data variables, including their measurement resolution and coverage.

For ASMU ch7 (Temperatures of Troposphere / Stratosphere (TTS)) output:

- 1) TTS monthly climatology (K) in 2.5x2.5 grid
- 2) Monthly mean TTS (K) in 2.5x2.5 grid
- 3) monthly mean TTS anomalies (in K) in 2.5x2.5 grid

For ASMU ch9 (temperatures in the lower stratosphere (TLS)) output:

- 1) TLS monthly climatology (K) in 2.5x2.5 grid
- 2) Monthly mean TLS (K) in 2.5x2.5 grid
- 3) monthly mean TLS anomalies (in K) in 2.5x2.5 grid

4. What is the time period covered by the dataset? (YYYY-MM-DD, YYYY-MM or YYYY)

From 2001-05 to 2013-03

5. Edition or version number(s) of the dataset:

for ch7 data: v1.0; for ch9 data: v1.1

6. Describe the level to which the data are processed. For example, are these unprocessed raw observations, derived parameters, quality controlled or inter-calibrated data, etc.?

These are calibrated data with several rigid quality control criteria and intensive assessments

7. Approximate date when the dataset was or will be released to the public:

2013-10-31

8. Who are the expected users of the archived data? How will the archived data be used?

climate scientists, decision makers, climate modelers etc

9. Has the dataset undergone user evaluation and/or an independent review process? Did NCEI participate in design reviews?

No

10. Describe the dataset's relationship to other archived datasets, such as earlier versions or related source data. If this is a new version, how does it improve upon the previous version(s)?

None

11. List the input datasets and ancillary information used to produce the data.

Ch7 dataset : AMSU ch7 data from multiple AMSU missions

Ch9 dataset : AMSU ch9 data from multiple AMSU missions

12. List web pages and other links that provide information on the data.

The algorithm development document (C-ATBD), data flow diagram, and maturity matrix for both AMSU ch7 datasets and AMSU ch9 data sets are restored under

<http://www.ncdc.noaa.gov/cdr/operationalcdrs.html>

The meta data (i.e., C-ATBD) are created by following NCDC C-ATBD template.

The maturity matrix is also provided by NCDC where UCAR COSMIC use this maturity matrix to mark the maturity levels for the currently delivered datasets.

13. List the kinds of documents, metadata and code that are available for archiving. For example, data format specifications, user guides, algorithm documentation, metadata compliant with a standard such as ISO 19115, source code, platform/instrument metadata, data/process flow diagrams, etc.

1. C-ATBD for ch7 dataset.

C-ATBD for ch9 dataset.

14. Indicate the data file format(s).

1. netCDF-4

15. Are the data files compressed?

No

16. Provide details on how the files are named and how they are organized (e.g., file_name_pattern_YYYYMM.tar in monthly aggregations).

There are three types of files and they are following the filename pattern:

<ShortName>_<FileType>_<Version>_s<BeginDate>_e<EndDate>_c<CreateDateTime>.<Ext>

The details are described in the "Data submission agreement"

File Name Field Definitions are :

<ShortName>

AMSU-CH7-RO-CAL-BT-CDR = identifies the file as AMSU channel 7 RO calibrated

brightness temperature <FileType>

MON - indicates file contains CDR quality monthly netCDF files

ANOM - indicates file contains CDR quality anomaly netCDF files

CLIM - indicates file contains CDR quality

climatology netCDF files <Version>

Version of file; starting at V01R00, current

version is V01R01 s<BeginDate>

begin date of data within file; format

sYYYYMM e<EndDate>

end date of data within file; format eYYYYMM c<CreateDateTime>

create date of tar file; format cYYYYMMDD <Ext>

file extension of file; static: nc

17. Explain how to access sample data files and/or a file listing for previewing. If it is not available now, when will it be available?

For example, the data files for for ch 7 are like:

AMSU-CH7-RO-CAL-BT- CDR_V01R01_MON_s200105_e200112_c20130826.nc

AMSU-CH7-RO-CAL-BT- CDR_V01R01_ANOM_s201201_e201212_c20130826.nc

AMSU-CH7-RO-CAL-BT- CDR_V01R01_CLIM_s200105_e201212_c20130826.nc

18. What is the total data volume to be submitted?

Historic Data: all historic data or data submitted as a completed collection.

Total Data Volume: 13MB

Number of Data Files: 27

Continuous Data: data volume rate for a continuous data production.

Total Data Volume Rate: 2.4MB per Year

Data File Frequency: 8 per Year

Data Production Start: 2001-05-31

19. Are later updates, revisions or replacement files anticipated? If so, explain the conditions for submitting these additional data to the archive.

No additional updates, revisions or replacement data are anticipated.

20. Describe the server that will connect to the ingest server at NCEI for submitting the data.

Physical Location: boulder CO USA

System Name: ftp.cosmic

System Owner: UCAR COSMIC team

Additional Information:

21. What are the possible methods for submitting the data to NCEI? Select all that apply.

1. FTP PULL

22. Identify how you would like NCEI to distribute the data. Web access support depends on the resources available for the dataset.

1. Unknown

23. Will there be any distribution, usage, or other restrictions that apply to the data in the archive?

No known constraints apply to the data.

24. Discuss the rationale for archiving the dataset and the anticipated benefits. Mention any risks associated with not archiving the dataset at NCEI.

Under the agreement NOAA GRANT NA07OAR4310224 that NCAR will deliver the amsu ch7 and ch9 data to NCDC. These data sets will be used to estimate temperature trend due to global warming which has significantly social impacts. These data sets will also help climate modelers to improve their models and would help decision makers to make proper decisions for climate mitigation etc.

25. Are the data archived at another facility or are there plans to do so? Please explain.

No

26. Is there an existing agreement or requirement driving this request to archive? Have you already contacted someone at NCEI?

No

27. Do you have a data management plan for your data?

No

28. Have funds been allocated to archive the data at NCEI?

No

29. Identify the affiliated research project, its sponsor, and any project/grant ID as applicable.

This is supported under NOAA GRANT NA07OAR4310224

30. Is there a desired deadline for NCEI to archive and provide access to the data?

Archive by: 2013-10-16

Accessible by:

31. Add any other pertinent information for this request.

None